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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
DYE, ROBERT C	
ART UNIT	PAPER NUMBER
4151	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/582,512	JAMIA, AULIS	
	Examiner	Art Unit	
	ROBERT DYE	4151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 June 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7* is/are rejected.

7)☒ Claim(s) *1,5* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09 June 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/10/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

On page 3, line 30 of the specification, it is not clear what is meant by "the shirts of strip open off the sheet".

Appropriate correction is required.

Claim Objections

2. Claims 1 and 5 are objected to because of the following informalities:

3. Claim 1 recites the limitation "...edge portion of sheet (1)" in line 1 and "…using device (3)" in line 2. It should be corrected to --edge portion of a sheet (1)-- and --using a device (3)-- since these features have not been mentioned before in claim 1. Additionally, "…plastic mass fed into die (3)" in line 9 of the claim is not clear since reference (3) refers to the device and the die space is referred to as (7).

4. Claim 5 recites the limitation "the track" in line 1. It should be corrected to --a track-- since this feature has not been mentioned before in claim 5.

5. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 2 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Regarding claims 2 and 7, the phrase "for instance" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims 1 and 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cornils et al. (US Patent RE 37,341, already of record) in view of Hiroshi et al. (Japanese Patent JP7304085, already of record).

12. Cornils et al. teach a method for applying a strip of thermoplastic material to the edge of sheet (col 1, lines 17-19) wherein the edge of the sheet is fitted into an extruder device and plastic material is fed into the die space enclosed by restrictive organs (sealing ledges, see Item 31 in Figure 1) and die surfaces. The apparatus moves around the edge of the sheet applying the plastic material. Cornils et al. also teach the sheets are heated before application of the thermoplastic material (col 6, line 55-56). Cornils et al. does not teach the heating of the die space during the extrusion process.

13. In the same field of endeavor of extrusion of plastic materials, Hiroshi et al. teach a method wherein the extruder is provided with a heating device (Item 15) for the purpose of decreasing the resin pressure required to perform the extrusion process (translated abstract). It would have been obvious to a person having ordinary skill in the art at the time of the invention to have included a heating element within the extruder as taught by Hiroshi et al. in the extrusion method of Cornils et al. for the purpose of heating the resin as it is introduced into the die cavity and thus reducing the required resin pressure for extrusion.

14. Although Cornils et al. and Hiroshi et al. do not explicitly teach a temperature difference of at least 10-200°C, it would have been obvious to a person having ordinary skill in the art at the time of the invention to use routine experimentation to adjust the heating elements of the extruder as necessary so as to heat the resin material and obtain a desired extrusion pressure for the desired resin used.

15. Regarding claim 4, Cornils et al. teach the plastic material used in the device is extruded through the die (40) under pressure (col. 7, lines 59-68). The presence of a back pressure at the discharge opening would be inherent.

16. Regarding claim 5, Cornils et al. teach that the extruder device may be fixed and the pane can be moved through it (col. 8, lines 63-68). This would obviously require that the pane move on a track (path along which something moves).

17. Regarding claim 6, Cornils et al. teach that the extruder device may be moved along the edge of the sheet (col 6, lines 35-37).

18. Regarding claim 7, Cornils et al. teach the die space is enclosed around the sheet edge (see figures 1-3).

19. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cornils et al. (US Patent RE37,341, already of record) and Hiroshi et al. (Japanese Patent JP7304085, already of record) as applied to claim 1 above, and further in view of Honig (PG Pub US2002/0030301).

20. The hypothetical combination of Cornils et al. and Hiroshi et al. teach the method of forming a plastic strip on the edge of a sheet as described above; however, they do not teach a method wherein the strip is actively cooled following extrusion. In the same field of endeavor of forming plastic edge strips on a sheet material, Honig teaches that "formed strip travels past a cooling device which uses either air or water to cool the formed strip" ([0044]) for the purpose of increasing the rate at which the edge strips solidify and thus reducing the processing time.

21. It would have been obvious to a person having ordinary skill in the art at the time of the invention to actively cool the formed strip as taught by Honig in the hypothetical combination of Cornils et al. and Hiroshi et al. for the purpose of increasing the rate at which the edge strips solidify and thus reducing the processing time.

22. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cornils et al. (US Patent RE37,341, already of record) and Hiroshi et al. (Japanese Patent JP7304085, already of record) as applied to claim 1 above, and further in view of Marttila (US Patent 5,928,482, already of record).

23. The hypothetical combination of Cornils et al. and Hiroshi et al. teach the method of forming a plastic strip on the edge of a sheet as described above; however, they do not teach a method wherein the sheet edge has shapes such as holes or grooves to improve the adhesiveness of the strip. In the same field of endeavor of forming plastic edge strips on a sheet material, Marttila teaches that prior to the installation of the sheet is cleaned and pretreated for instance by "sand-blasting or perforating" (col 3, line 49). Perforation pretreatment would introduce holes into the edge and obviously increase the adhesiveness of the strip by introducing spaces for the resin to fill in. It would have been obvious to a person having ordinary skill in the art at the time of the invention to introduced holes in to the sheet edge as taught by Marttila in the hypothetical combination of Cornils et al. and Hiroshi et al. for the purpose of increasing the adhesiveness of the strip.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT DYE whose telephone number is (571)270-7059. The examiner can normally be reached on Monday to Friday 8:00AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Ortiz can be reached on (571)272-1206. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. D./

/Angela Ortiz/
Supervisory Patent Examiner, Art Unit 4151